

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A liquid crystal display device comprising  
a pair of substrates, at least one of which is transparent;  
a liquid crystal layer between the pair of substrates;  
a group of electrodes formed on at least one of the ~~pair of~~ substrates and adapted to  
apply an electric field to ~~[[a]] said liquid crystal layer, layer disposed between the pair of~~  
~~substrates, wherein~~ the electric field ~~having~~ has a component substantially parallel to the  
surfaces of the substrates;  
and an alignment layer disposed between the liquid crystal layer and at least one of  
the ~~pair of~~ substrates, ~~substrates and having~~  
wherein the alignment layer has been subjected to liquid crystal anchoring treatments  
in plural directions to form a plurality of liquid crystal in-plane anchoring directions,  
~~the liquid crystal display device being characterized in that~~  
the plurality of liquid crystal in-plane anchoring directions of the alignment layer  
form substantially equal angles relative to one another on the corresponding substrate surface,  
and  
a ~~rising~~ pretilt angle in each of the liquid crystal anchoring direction with respect to  
the corresponding substrate surface is substantially zero.

Claim 2 (Currently Amended): A liquid crystal display device comprising  
a pair of substrates, at least one of which is transparent;  
a liquid crystal layer between the pair of substrates;  
a group of electrodes formed on at least one of the ~~pair of~~ substrates and adapted to  
apply an electric field to ~~[[a]] the liquid crystal layer, layer disposed between the pair of~~

~~substrates~~, the electric field having component substantially parallel to the surfaces of the substrates; and

an alignment layer disposed between the liquid crystal layer and at least one of the ~~pair of substrates and having~~

wherein the alignment layer has been subjected to liquid crystal anchoring treatments in two directions to form two liquid crystal in-plane anchoring directions; ,the liquid crystal display device being characterized in that

the two liquid crystal in-plane anchoring directions of the alignment layer form an angle of about 90° relative to each other on the corresponding substrate surface; ~~and~~

a ~~rising~~ pretilt angle in one liquid crystal anchoring direction with respect to the corresponding substrate surface is substantially zero, ~~and~~

a ~~rising~~ pretilt angle in the other liquid crystal anchoring direction with respect to the corresponding substrate surface is ~~note~~ not substantially zero; and

the device is capable of maintaining two stable in-plane alignment states of the liquid crystal layer even after the removal of the applied electric field.

Claim 3 (Currently Amended): A liquid crystal display device according to claim 1, wherein at least one of the liquid crystal anchoring treatments in ~~the~~ plural directions comprises is a process for

performing uniform anchoring treatment over an entire target area in each of the in-plane directions.

Claim 4 (Currently Amended): A liquid crystal display device according to claim 1, wherein at least one of the liquid crystal anchoring treatments in ~~the~~ plural in-plane directions is a process for comprises

dividing an entire target area into plural sub-areas corresponding to the plural in-plane directions and

performing anchoring treatment in each of the sub-areas in the corresponding in-plane direction.

Claim 5 (Currently Amended): A liquid crystal display device according to claim 1, wherein at least one of the liquid crystal anchoring treatments in ~~the~~ plural in-plane directions ~~is a process for~~ comprises

irradiating the alignment layer with linearly polarized light ~~that can cause~~ which is capable of causing a chemical reaction on the surface of the corresponding substrate.

Claim 6 (Currently Amended): A liquid crystal display device according to claim 1, wherein at least one of the liquid crystal anchoring treatments in ~~the~~ plural in-plane directions ~~is a process for~~ comprises

scanning the alignment layer with a probe ~~that can impart~~ which is capable of imparting stress to the surface of the corresponding substrate.

Claim 7 (Currently Amended): A liquid crystal display device according to claim 1, wherein at least one of the liquid crystal anchoring treatments in ~~the~~ plural in-plane directions ~~is a process for~~ comprises

scanning the alignment layer with light ~~that can cause~~ which is capable of causing a chemical reaction on the surface of the corresponding substrate.

Claim 8 (Withdrawn): A liquid crystal display device according to claim 1, wherein the liquid crystal layer ~~is formed of~~ comprises a liquid crystal material which ~~contains~~ comprises chiral molecules. ~~molecules as a component.~~

Claim 9 (Withdrawn): A liquid crystal display device according to claim 1, wherein the liquid crystal layer ~~is formed of~~ comprises a liquid crystal material ~~whose~~ having a positive or negative dielectric anisotropy ~~becomes positive or negative~~ depending on the frequency of an applied AC electric field.

Claim 10 (Withdrawn): A liquid crystal display device according to claim 1, ~~wherein~~ ~~in addition to the group of electrodes for applying to the liquid crystal layer an electric field~~ ~~having a component substantially parallel to the surfaces of the substrates,~~ further comprising an additional electrode ~~is disposed~~ on each of the pair of substrates ~~in such a manner that~~ wherein the additional electrodes ~~provided on the pair of substrates~~ form a pair.

Claim 11 (Withdrawn): A liquid crystal display device according to claim 1, ~~wherein~~ further comprising a light reflection plate ~~is disposed~~ on one of the pair of substrates.

Claim 12 (Currently Amended): A liquid crystal display device according to claim 2, wherein at least one of the liquid crystal anchoring treatments in the plural in-plane directions ~~is a process for~~ comprises

performing uniform anchoring treatment over an entire target area in each of the in-plane directions.

Claim 13 (Currently Amended): A liquid crystal display device according to claim 2, wherein at least one of the liquid crystal anchoring treatments in ~~the~~ plural in-plane directions ~~is a process for~~ comprises

dividing an entire target area into plural sub-areas corresponding to the plural in-plane directions and

performing anchoring treatment in each of the sub-areas in the corresponding in-plane direction.

Claim 14 (Currently Amended): A liquid crystal display device according to claim 2, wherein at least one of the liquid crystal anchoring treatments in ~~the~~ plural in-plane directions ~~is a process for~~ comprises

irradiating the alignment layer with linearly polarized light ~~that can cause~~ which is capable of causing a chemical reaction on the surface of the corresponding substrate.

Claim 15 (Currently Amended): A liquid crystal display device according to claim 2, wherein at least one of the liquid crystal anchoring treatments in ~~the~~ plural in-plane directions ~~is a process for~~ comprises

scanning the alignment layer with a probe ~~that can impart~~ which is capable of imparting stress to the surface of the corresponding substrate.

Claim 16 (Currently Amended): A liquid crystal display device according to claim 2, wherein at least one of the liquid crystal anchoring treatments in ~~the~~ plural in-plane directions ~~is a process for~~ comprises

scanning the alignment layer with light ~~that can cause~~ which is capable of causing a chemical reaction on the surface of the corresponding substrate.

Claim 17 (Withdrawn): A liquid crystal display device according to claim 2, wherein the liquid crystal layer ~~is formed of~~ comprises a liquid crystal material which ~~contains~~ comprises chiral molecules. ~~molecules as a component.~~

Claim 18 (Withdrawn): A liquid crystal display device according to claim 2, wherein the liquid crystal layer ~~is formed of~~ comprises a liquid crystal material ~~whose~~ having a positive or negative dielectric anisotropy ~~becomes positive or negative~~ depending on the frequency of an applied AC electric field.

Claim 19 (Withdrawn): A liquid crystal display device according to claim 2, ~~wherein~~ ~~in addition to the group of electrodes for applying to the liquid crystal layer an electric field~~ ~~having a component substantially parallel to the surfaces of the substrates,~~ further comprising an additional electrode is disposed on each of the pair of substrates ~~in such a manner that~~ wherein the additional electrodes ~~provided on the pair of substrates~~ form a pair.

Claim 20 (Withdrawn): A liquid crystal display device according to claim 2, ~~wherein~~ further comprising a light reflection plate ~~is disposed~~ on one of the pair of substrates.

Claim 21 (New): The liquid crystal display device according to claim 1, wherein the device is capable of maintaining a plurality of stable in-plane alignment states of the liquid crystal layer even after the removal of the applied electric field.